

REMARKS

This Amendment is filed in response to the Final Office Action mailed May 22, 2009 in connection with a Request for Continued Examination and a Petition for a 1-month Extension of Time. The Applicant respectfully requests reconsideration. All objections and rejections are respectfully traversed.

Claims 1-6, 8-13, 15-20, 22-27 and 28-36 are now pending in the application.

Claims 1, 6, 8, 13, 15, 20, 22, 27 and 29 have been amended. Such amendments are supported by the specification at paragraphs 0028 and 0032, among other places.

Claims 7, 14, 21, and 28 have been cancelled.

New claim 33-36 has been added. Such new claims are supported by the specification at paragraphs 0021-0023, 0026, 0028, and 0032, among other places.

Claim Rejections - 35 U.S.C. §103

At paragraphs 7-19 of the Final Office Action, claims 1-32 were rejected under 35 U.S.C. §103(a) over Suzuki, U.S. Publication No. 2004/0100983 (hereinafter ‘Suzuki’) in view of Watanuki et al., U.S. Patent No. 6,853,639 (hereinafter “Watanuki”).

The Applicant’s claim 1, representative in part of the other rejected claims, sets forth (emphasis added):

1. (CURRENTLY AMENDED) A method for providing request compatibility in a multicast system, said method comprising:

receiving, by a layer 2 switch coupled between a group of receivers and a router, requests for traffic from said group of receivers;

determining, by said layer 2 switch, whether said traffic requests contain incompatible request types;

if incompatible request types exist, then separating said traffic requests into at least two groups based on type; and

creating a first host identity at said layer 2 switch associated with a first address available to said layer 2 switch;

creating a second host identity at said layer 2 switch associated with a second address available to said layer 2 switch;

sending requests of a first group of said at least two groups from said first host identity of said layer 2 switch to said router, and sending requests of a second group of said at least two groups from said second host identity of said layer 2 switch to said router, to present an appearance to said router that the requests of different types are from different hosts.

Suzuki describes a multicast router (Fig. 1, 110) configured to translate “an any-source multicast group join request” sent by a client node (Fig. 1, 100) to become “a source-specific multicast join request”, before forwarding it on the multicast source server. *See* Suzuki paragraph 0018, lines 1-4 and paragraph 0019, lines 1-6. The principle difference between any-source multicast routing and source-specific multicast routing is that any-source multicast routing does not specify the address of the multicast source server of the multicast packet stream, while source-specific multicast routing specifies the address of the multicast source server (i.e. its join requests contain the “source address” of the multicast source server). *See* Suzuki paragraph 0008, lines 1-7. When Suzuki’s multicast router (Fig. 1, 110) receives a packet from a client node (Fig. 1, 100) that “is not of the source-specific type” the router searches a table for an entry that matches the address of the client node, and reads from that entry the “source address” of the multicast source server. *See* paragraph 0064, lines 1-9 and 0066, 1-5. The multicast router then “translates the join request into a multicast group join request of the source-specific type” by including the “source address” of the multicast source server that was found from the table in the join message. *See* paragraph 0067, lines 1-11.

Watanuki discusses an “inter-LAN relay device 20” that checks if a layer 3 (L3) multicast protocol is used in a message, and, if so, “convert[s] the L3 multicast protocol message into an L2 multicast protocol message.” *See* Watanuki col. 5, line 7 to col. 6, line 3 and col. 7, lines 22-26.

The Applicant respectfully urges that both Suzuki and Watanuki are silent concerning the Applicant’s claimed “*creating a first host identity at said layer 2 switch as-*

sociated with a first address available to said layer 2 switch” and “creating a second host identity at said layer 2 switch associated with a second address available to said layer 2 switch” and “sending requests of a first group of said at least two groups from said first host identity of said layer 2 switch to said router, and sending requests of a second group of said at least two groups from said second host identity of said layer 2 switch to said router, to present an appearance to said router that the requests of different types are from different hosts.”

In previous techniques, incompatibility issues have arisen when an L2 switch attempted to aggregate multicast requests of different types. Referring to the Applicant's Fig. 1, a L2 switch 130 may attempt to aggregate multicast requests from receivers and pass a reduced number of multicast requests up to a router 120. If successful, the router 120 would see a reduced number of multicast requests from one host (e.g., the L2 switch), rather than many requests from many different receivers. However, with prior techniques, problems have arisen. For example, when an L2 switch has attempted to aggregate certain requests undesirable incompatibility issues have generally occurred. Under prior techniques, the L2 switch issued requests that appear to be conflicting if coming from a single host. Interpreting such requests as coming from a single host, the router would typically switch back and forth between modes, causing various problems. See specification paragraphs 0021-0023

The Applicant addresses these and other shortcomings by *“creating a first host identity at said layer 2 switch associated with a first address available to said layer 2 switch” and “creating a second host identity at said layer 2 switch associated with a second address available to said layer 2 switch” and “sending requests of a first group of said at least two groups from said first host identity of said layer 2 switch to said router, and sending requests of a second group of said at least two groups from said second host identity of said layer 2 switch to said router, to present an appearance to said router that the requests of different types are from different hosts.”* As the now requests appear to be from different hosts, the problems that have occurred in prior techniques may be avoided.

The combination of Suzuki and Watanuki does not suggest what the Applicant claims. Rather than create a first host identity at a layer 2 switch associated with a first address available to the layer 2 switch and create a second host identity at the layer 2 switch associated with a second address available to the layer 2 switch, and send requests of different types for these different host identities, Suzuki describes a quite different approach that attempts to convert requests of different types all to one type. Specifically, Suzuki states “according to the invention, an any-source-multicast group join request sent from a client node to a router is translated into a source-specific-multicast group join request” by his router 110. *See* Suzuki paragraph 0018. That is, an any-source-multicast join request received on line 116 at the router 110, is translated, and then output as a source-specific multicast packet on a different line. *See* Suzuki paragraph 0061 and Fig. 3.

Combination with Watanuki does not remedy the shortcomings of Suzuki. Watanuki merely discusses an “inter-LAN relay device 20” that checks if a layer 3 (L3) multicast protocol is used in a message, and, if so, “convert[s] the L3 multicast protocol message into an L2 multicast protocol message.” *See* Watanuki col. 5, line 7 to col. 6, line 3 and col. 7, lines 22-26. Such message protocol conversion in no way suggests creating a first host identity at a layer 2 switch associated with a first address available to the layer 2 switch, and creating a second host identity at the layer 2 switch associated with a second address available to the layer 2 switch, and sending requests of different types for these different host identities.

Accordingly, the Applicant respectfully urges that the combination of Suzuki and Watanuki is legally insufficient to make obvious the present claims under 35 U.S.C. §103 because of the absence of the Applicant’s claimed novel “*creating a first host identity at said layer 2 switch associated with a first address available to said layer 2 switch*” and “*creating a second host identity at said layer 2 switch associated with a second address available to said layer 2 switch*” and “*sending requests of a first group of said at least two groups from said first host identity of said layer 2 switch to said router, and sending requests of a second group of said at least two groups from said second host iden-*

tity of said layer 2 switch to said router, to present an appearance to said router that the requests of different types are from different hosts.”

In the event that the Examiner deems further personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.

In summary, all the independent claims are believed to be in condition for allowance and therefore all dependent claims that depend there from are believed to be in condition for allowance. The Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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